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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/375,710	08/17/1999	BRIAN M. UNITT	476-1830	5479

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EXAMINER

YAO, KWANG BIN

ART UNIT	PAPER NUMBER
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2667

DATE MAILED: 06/23/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/375,710

Applicant(s)

UNITT ET AL.

Examiner

Kwang B. Yao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 15-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 15-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Reopening of Prosecution

1. In view of the Appeal Brief filed on 3/29/04, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed limitations of “voice packets are routed within the IP network to one or more gateways providing access to a PSTN” recited in claim; “wherein each said voice packet is provided with a compressed header” recited in claim 8; “wherein compressed header packets directed at a common gateway are embedded in an IP packet having a full header” recited in claim 9; “wherein each voice packet comprising the

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digitally encoded voice traffic is provided with a compressed header” recited in claim 20 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-6, 15-19, 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Roy (US 6,049,531).

Roy discloses a communication system comprising the following features: as depicted in Figs. 1A, 1B, 3, 6, regarding claim 1, a method of transporting packet voice (691) and data (609) traffic over a low bandwidth upstream communication path (ADSL LINE) from a subscriber location (170-1, 101-1), the method comprising performing at the subscriber location (170-1, 101-1) the steps of: generating a first internet protocol IP packet stream (673) carrying the voice (691) traffic; generating a second IP packet stream (673) carrying the data (609) traffic; segmenting (323) said first and second IP packet stream (673) into respective first and second ATM cell streams; and multiplexing said first and second ATM cell streams together for transport over said upstream communication path (ADSL LINE); regarding claim 2, wherein said upstream communication path (ADSL LINE) comprises a telephone subscriber loop; regarding claim 3, wherein said subscriber loop carries a asymmetric digital subscriber line ADSL service; regarding claim 4, wherein said first and second cell streams are adaptation layer five AAL5 cell streams; regarding claim 5, wherein said first and second cell streams are re-assembled into respective voice (691) and data (609) packets for transport over an IP network;

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regarding claim 6, wherein said voice (691) packets are routed within the IP network to one or more gateways (106-9) providing access to a PSTN (111-11); regarding claim 15, A subscriber station for providing digital communication with an access multiplexer (105-1) over a subscriber loop, the subscriber station incorporating means for generating a first IP packet stream (673) comprising digitally encoded voice (691) traffic and a second IP packet stream (673) comprising data (609) traffic, means for segmenting (323) said first and second IP packet stream (673)s into respective first and second ATM cell streams, and multiplexing means for multiplexing said first and second ATM cell streams together for transport to the access multiplexer (105-1) over said subscriber loop; regarding claim 16, A method of transporting packetized delay sensitive (691) and delay insensitive (689) traffic on a low bandwidth, upstream communications path (ADSL LINE) from a subscriber location (170-1, 101-1), said method comprising performing at the subscriber location (170-1, 101-1) the following steps: generating a first packet stream carrying the delay sensitive (691) traffic according to a first packet protocol; generating a second packet stream carrying the delay insensitive (689) traffic according to said first packet protocol; segmenting (323) said first and second packet streams to form respective first and second packet streams in accordance with a second packet protocol; multiplexing said first and second packets streams formed in accordance with said second packet protocol for transport over the upstream communications path (ADSL LINE), wherein said second packet protocol has a packet length that is smaller than that of the first packet protocol; regarding claim 17, wherein the first packet protocol is the Internet Protocol IP and the second protocol is the Asynchronous Transfer Mode ATM protocol; regarding claim 18, wherein said upstream communication path (ADSL LINE) is a subscriber loop carrying an asymmetric digital subscriber line ADSL service; regarding

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claim 19, a method according to claim 16, wherein said first packet stream comprising said delay sensitive (691) traffic comprises digitally encoded voice (691) traffic and said second packet stream comprising said delay insensitive (689) traffic comprises data (609) traffic; regarding claim 21, A subscriber installation for providing digital communication with an access multiplexer (105-1) over a low bandwidth, upstream communication path (ADSL LINE), comprises means for generating a first packet stream comprising delay sensitive (691) traffic, said first packet stream being generated in accordance with a first packet protocol; means for generating a second packet stream in accordance with said first packet protocol comprising delay insensitive (689) traffic; means for segmenting (323) said first and second packet streams in accordance with a second packet protocol; a multiplexer (105-1) for multiplexing said first and second cell streams for transport over said upstream communications path (ADSL LINE), wherein the first packet protocol has a packet length greater than that of the second packet protocol; regarding claim 22, wherein the first packet protocol is IP and the second packet protocol is ATM; regarding claim 23, wherein the upstream communications path (ADSL LINE) comprises a subscriber loop carrying an ADSL service. See column 3, line 58 to column 20, line 10.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7-9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roy (US 6,049,531) in view of Civanlar et al. (US 6,339,594).

Roy discloses the claimed limitations stated as above. Roy further discloses the following features: as depicted in Figs. 1A, 1B, 6, regarding claim 8 header packets directed at a common gateway (106-9) are embedded in an IP packet (673) having a full header; regarding claim 9, header packets directed at a common gateway (106-9) are embedded in a single ATM virtual circuit, see column 9, line 23 to column 10, line 27. Roy does not disclose the following features of: regarding claims 7-9, each said voice packet is provided with a compressed header; regarding claim 20, wherein each voice packet comprising the digitally encoded voice traffic is provided with a compressed header. Civanlar et al. discloses a communication system comprising the following features: regarding claims 7-9, each said voice packet is provided with a compressed header; regarding claim 20, wherein each voice packet comprising the digitally encoded voice traffic is provided with a compressed header. See column 1, line 62 to column 2, line 4. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Roy, by using the features, as taught by Civanlar et al., in order to provide greater transmission efficiency. See Civanlar et al., column 1, lines 63-65.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gupta et al. (US 6,731,627) discloses a virtual loop carrier system.

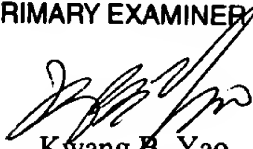
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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 703-308-7583. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO
PRIMARY EXAMINER



Kwang B. Yao
June 21, 2004